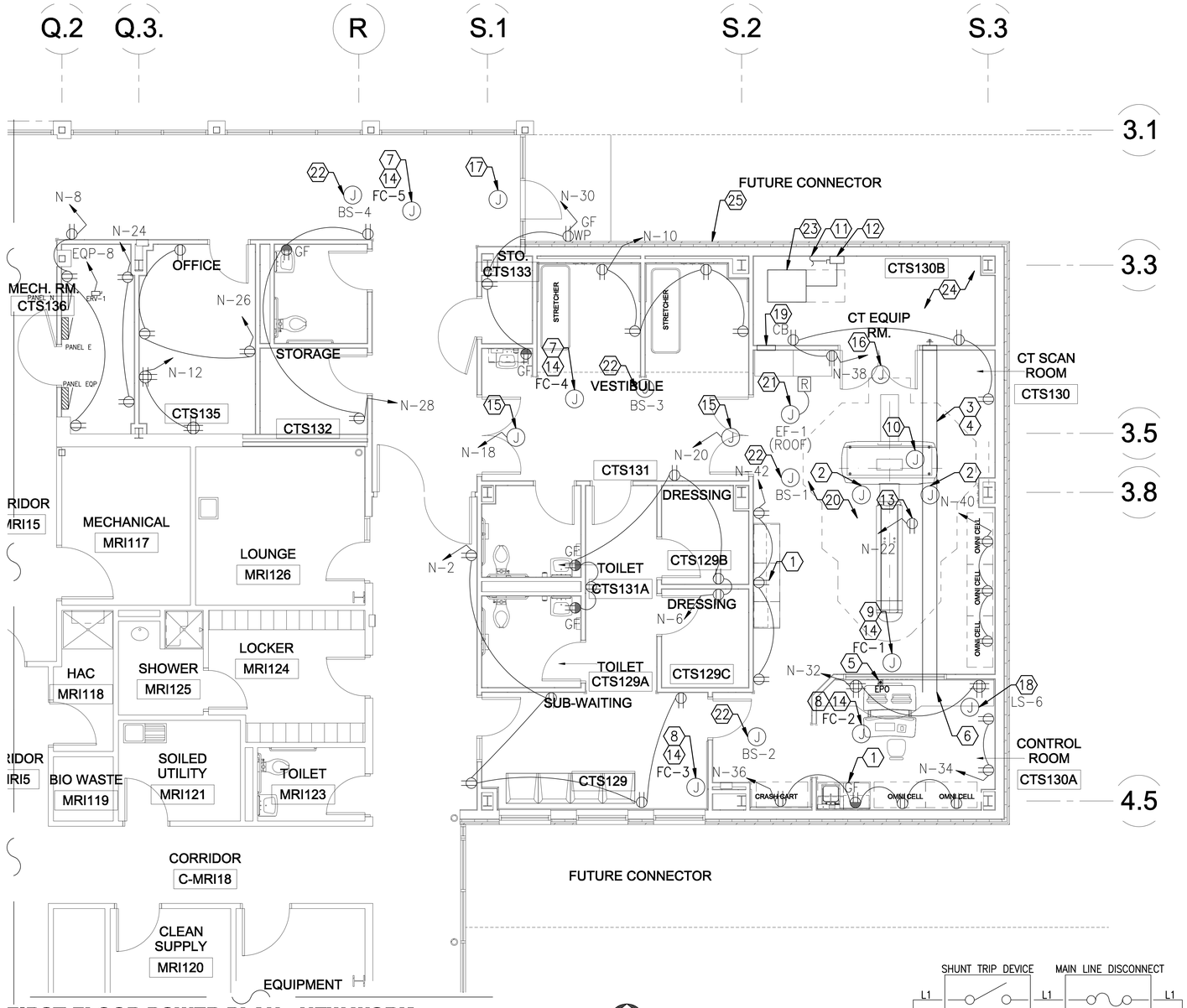
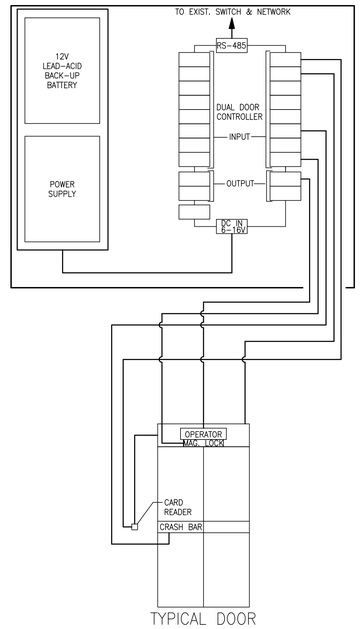


FIRST FLOOR POWER PLAN - NEW WORK

SCALE: 1/4" = 1 FOOT

NORTH



TYPICAL DOOR

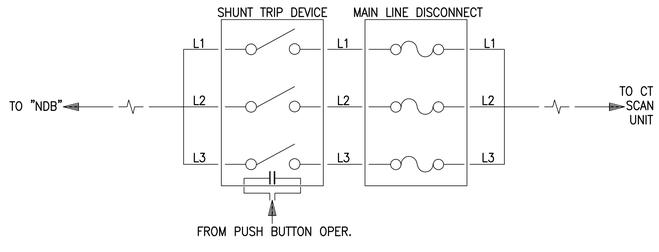
01 - TYPICAL ACCESS CONTROL DIAGRAM

SCALE: NONE

ELECTRICAL DRAWING NOTES

GENERAL NOTE: COORDINATE ALL POWER DISTRIBUTION WITH SITE-SPECIFIC CT SCAN UNIT / VENDOR DRAWINGS AND REQUIREMENTS.

1. MOUNT ABOVE CASEWORK LEVEL.
2. OVERHEAD POWER CONNECTION – MOUNT JUNCTION BOX ABOVE CEILING, SECURED TO STRUCTURE. PROVIDE TOGGLE-SWITCH DISCONNECT AT EACH JUNCTION BOX.
3. 4" CONDUIT BANK IN SLAB. SEE CT SCAN SUITE SITE SPECIFIC DRAWINGS FOR ADDITIONAL INFORMATION.
4. PROVIDE 2" CONDUIT FROM CONTROL ROOM JUNCTION BOX TO CT SCAN EQUIPMENT CONNECTION. PROVIDE A 2" GROMMETED OPENING IN COVER OF CONDUIT FOR INJECTOR IN SCAN ROOM AND AT CONTROL DESK.
5. PUSHBUTTON FOR SHUNT-TRIP BREAKER OPERATION.
6. PROVIDE CONDUIT AT CONTROL DESK. RUN WALL CONDUIT GROUP UP WALL AND PROVIDE THREE (3) 3" CONDUITS BACK TO EQUIPMENT ROOM.
7. CONNECT VRV FAN COIL UNIT TO CIRCUIT N-15.
8. CONNECT VRV FAN COIL UNIT TO CIRCUIT N-11.
9. CONNECT VRV FAN COIL UNIT TO CIRCUIT EQP-5.
10. POWER CONNECTION FOR CT SCAN UNIT. CONNECT CIRCUIT TO UPS SYSTEM IN CT EQUIPMENT ROOM.
11. TO SYSTEM EMERGENCY OFF (SEO).
12. "A1" PRIMARY POWER DISCONNECT. 3 POLE, 380-480 V COMBINATION BREAKER WITH MAGNETIC CONTACTOR, INCLUDE OPTIONAL UPS INTERFACE.
13. CEILING MOUNTED RECEPTACLE FOR PATIENT LIFT ASSEMBLY. COORDINATE WITH EQUIPMENT.
14. PROVIDE AND MOUNT DISCONNECTS FOR FAN COIL UNITS ABOVE CEILING, ADJACENT TO FAN COIL UNIT.
15. POWER CONNECTION TO AUTOMATIC DOOR OPERATOR. COORDINATE WITH SHEET ES 4.0.
16. POWER FOR ACCESS CONTROL AND ELECTRIC DOOR LATCHES (120V). CONNECT TO CIRCUIT LS-2. SEE DETAIL 01 THIS SHEET.
17. POWER FOR ACCESS CONTROL AND ELECTRIC DOOR LATCHES (120V). CONNECT TO CIRCUIT LS-4. SEE DETAIL 01 THIS SHEET.
18. POWER CONNECTION FOR INTERCOM SYSTEM (120V).
19. 250 A, 3-POLE SHUNT TRIP CIRCUIT BREAKER FOR CT SCAN UNIT. OPERATED BY ELECTRONIC PUSHBUTTON OPERATOR (EPO) IN CT SCAN CONTROL ROOM. RUN FIVE (5) 250 KCMIL CONDUCTORS WITH #4 GROUND WIRE IN 4" CONDUIT BACK TO CT SCAN BREAKER IN SWITCHBOARD NDB. SEE DETAIL 02 THIS SHEET.
20. SEE SITE SPECIFIC VENDOR DRAWINGS FOR CONDUIT RUNS, ADDITIONAL DEVICES, REQUIREMENTS, ETC. IN THIS SPACE.
21. PROVIDE TWO (2) RELAYS AND SWITCH FOR FAN. RELAYS SHALL BE 120V AC, COIL, RATED AT 1HP, 120V CONTACT CONTROLLED BY CT SCAN UNIT. ONE RELAY IS FOR CT SCAN EQUIPMENT TO ENERGIZE FAN, SECOND RELAY IS FOR MANUAL FAN CONTROL. CONTROL FURNISHED BY EQUIPMENT VENDOR. PROVIDE CONDUIT TO OXYGEN SENSOR AND SWITCH TO RELAY, RUN THROUGH FILTER PANEL. COORDINATE LOCATION IN-FIELD.
22. PROVIDE CONNECTION FOR VRV SYSTEM BRANCH SELECTOR CONTROLLER FROM LOAD-SIDE OF DISCONNECT SWITCH OF NEAREST VRV FAN COIL UNIT.
23. NEW 225 KVA TRANSFORMER FOR UPS UNIT
24. NEW 480V, 3-PHASE, 160 KVA UPS SYSTEM INSTALLED HERE. GROUNDED FOUR-WIRE WYE CONFIGURATION. PROVIDE DEDICATED 1/0 COPPER GROUND WIRE FROM MAIN DIST. PANEL. SEE SITE SPECIFIC DRAWINGS FOR ADDITIONAL INFORMATION. SUPPLIED FROM EDP2, ROOM BC-119, BLDG. 330.
25. PROVIDE ROOF-MOUNTED DISCONNECTS AND JUNCTION BOXES AS DESCRIBED ON SHEET MH 2.0. COORDINATE WITH MECHANICAL CONTRACTOR.



02 - SHUNT TRIP BREAKER DIAGRAM

SCALE: NONE

EQUIPMENT STARTERS AND DISCONNECTS

EQUIPMENT DESIGNATION	EQUIPMENT SERVED	HP (KVA)	NOTES	VOLTAGE: 120V-1PH	208V-1PH	208V-3PH	277V-1PH	480V-3PH	STARTER: NEMA SIZE	MAGNETIC	MANUAL	MANUAL STARTER W/ OVERLOAD	VAR FREQ DRIVE	INTEGRAL OVERLD	IN MCC	SEE NOTE	FURNISHED BY	DISCONNECT MEANS: DISCONNECT SW W/ AUX CONTACTS	MAN. STARTER CORD & PLUG	STARTER/DISC SWITCH OR BRKR	SEE NOTE	FURNISHED BY	CONTROL: MANUAL	MAG. LOCK	SEE NOTE	FURNISHED BY	FEEDER SIZE
CP-1	CONDENSATE RETURN PUMP	1/2	-	•										•			EC		•			EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
EWH-1	ELEC WALL HEATER	12.5 A	-	•										•			EC		•			EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
CU-1	COND. UNIT SUPPLY (ROOF)	72.2 A	1,3		•				•								EC	•			2	EC	•			HC	3 - #2, 1 - #8 GRD, 1-1/4" C
CU-1	COND. UNIT RETURN (ROOF)	72.2 A	1,3		•				•								EC	•			2	EC	•			HC	3 - #2, 1 - #8 GRD, 1-1/4" C
CU-2	COND. UNIT SUPPLY (ROOF)	72.2 A	1,3		•				•								EC	•			2	EC	•			HC	3 - #2, 1 - #8 GRD, 1-1/4" C
CU-2	COND. UNIT RETURN (ROOF)	72.2 A	1,3		•				•								EC	•			2	EC	•			HC	3 - #2, 1 - #8 GRD, 1-1/4" C
CU-3	COND. UNIT SUPPLY (ROOF)	72.2 A	1		•				•								EC	•			2	EC	•			HC	3 - #2, 1 - #8 GRD, 1-1/4" C
CU-3	COND. UNIT RETURN (ROOF)	72.2 A	1		•				•								EC	•			2	EC	•			HC	3 - #2, 1 - #8 GRD, 1-1/4" C
FC-1	VRV FAN COIL	(0.35)	2,3	•										•			EC				•	4	EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
FC-2	VRV FAN COIL	(0.35)	2	•										•			EC				•	4	EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
FC-3	VRV FAN COIL	(0.09)	2	•										•			EC				•	4	EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
FC-4	VRV FAN COIL	(0.09)	2	•										•			EC				•	4	EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
FC-5	VRV FAN COIL	(0.35)	2	•										•			EC				•	4	EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
EF-1	CT SCAN EXHAUST FAN (ROOF)	1/3	-	•										•			EC		•			EC	•			HC	2 - #12, 1 - #12 GRD, 3/4" C
ERV-1	ENERGY RECOV. VENT. EXH.	1/2	-		•				•								EC	•			6	EC	•			HC	3 - #12, 1 - #12 GRD, 3/4" C
ERV-1	ENERGY RECOV. VENT. SUPPLY	3/4	-		•				•								EC	•			6	EC	•			HC	3 - #12, 1 - #12 GRD, 3/4" C

NOTES

1.- UNIT CONSISTS OF TWO SEPARATE CONDENSING UNITS. EACH REQUIRES A SEPARATE ELECTRICAL CONNECTION.

2.- PROVIDE POWER CONNECTION FOR VRF SYSTEM BRANCH SELECTION CONTROLLER FROM LOAD SIDE OF DISCONNECT SWITCH.

3.- PROVIDE CONNECTION TO EMERGENCY POWER.

3023.00

Revisions	Date
ISSUED FOR BIDDING	01-31-2013

CONTECH DESIGN, INCORPORATED
Consulting Professional Engineers
519 Windsor Park Dr., Centerville, Ohio 45459
Phone: (937)435-3722 Fax (937) 435-4685
Email: engineers@contechdesign.com Engineer Project # 12014

STATE OF OHIO · PARMA NAND SINHA · 42620 · REGISTERED PROFESSIONAL ENGINEER

Revised By:

Drawing Title	Project Title	Date
ELECTRICAL NEW WORK POWER FLOOR PLANS	SITE PREP FOR CT SCANNER	01-31-2013
Approved: Project Manager: RANDI FIORINA	Building Number: 335 / Checked: PNS / Drawn: CONTECH	Project No.: 552-CSI-333
Approved: Service Chief: GARY ABREU	Location: 4100 WEST THIRD STREET DAYTON, OH 45428	Drawing No.: ES 3.1

VAMC, DAYTON

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

BASEMENT POWER PLAN BLDG. 330 - NEW WORK

SCALE: 1/8" = 1 FOOT

NORTH

ELECTRICAL DRAWING NOTES

1. FEEDERS FROM EXISTING PANELS TO NEW PANELS IN CT SCAN BUILDING, INCLUDING THREE TO PANELS AND ONE TO UPS ASSEMBLY.
2. ROUTE UPWARDS IN CHASE ADJACENT TO STAIRWAY. WHEREVER POSSIBLE, CO-LOCATE WITH ROUTES FOR NEW MRI BUILDING 335 FEEDS.

3023.00

Revisions	Date
ISSUED FOR BIDDING	01-31-2013

CONTECH DESIGN, INCORPORATED
Consulting Professional Engineers
519 Windsor Park Dr., Centerville, Ohio 45459
Phone: (937)435-3722 Fax: (937) 435-4685
Email: engineers@contechdesign.com Engineer Project # 12014

STATE OF OHIO PARMA NAND SINHA 42622 REGISTERED PROFESSIONAL ENGINEER

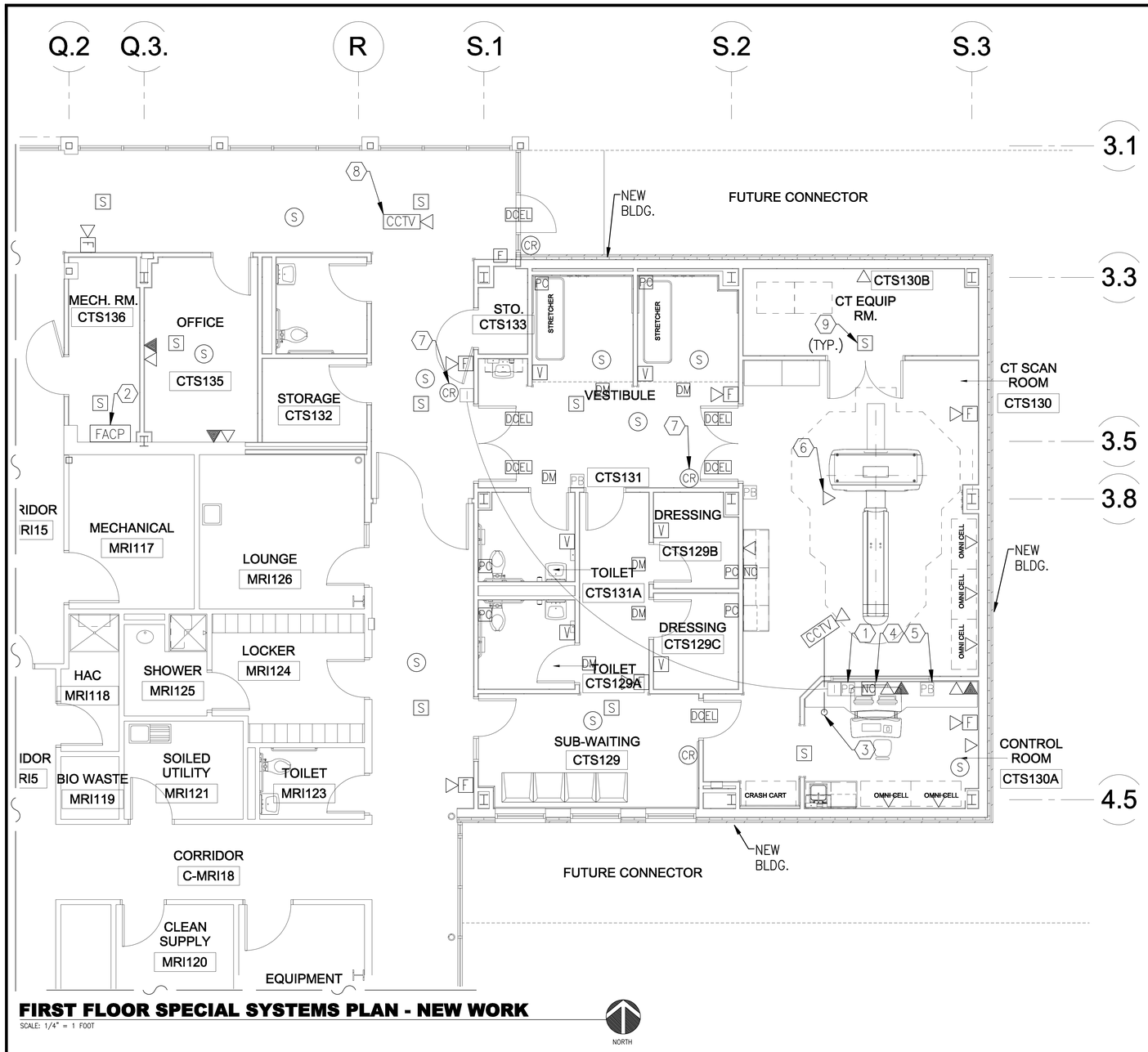
Revised By:

Drawing Title	**ELECTRICAL NEW WORK POWER FLOOR PLANS - B330 BASEMENT**
Project Title	SITE PREP FOR CT SCANNER
Date	01-31-2013
Project No.	552-CSI-333
Approved: Project Manager	RANDI FIORINA
Building Number	335
Checked	PNS
Drawn	CONTECH
Drawing No.	ES 3.2
Approved: Service Chief	GARY ABREU
Location	4100 WEST THIRD STREET DAYTON, OH 45428

VAMC, DAYTON

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



FIRST FLOOR SPECIAL SYSTEMS PLAN - NEW WORK

SCALE: 1/4" = 1 FOOT

NORTH

ELECTRICAL DRAWING NOTES

1. PUSHBUTTON RELEASE FOR CORRIDOR DOUBLE-DOOR.
2. FIRE ALARM PANEL. TIE INTO EXISTING FIRE ALARM SYSTEM IN ROOM 330-1C-149.
3. RUN 1-1/2" RIGID METAL CONDUIT ABOVE CEILING FROM CAMERA LOCATION TO CONTROL ROOM. PROVIDE JUNCTION BOX TERMINATION ABOVE CONTROL ROOM CEILING.
4. NURSE CALL MASTER CONTROL STATION. PROVIDE CONNECTION FROM THIS POINT TO THE NURSE CALL CENTER IN THE MRI ADDITION, BUILDING 335 ROOM MRI102.
5. PANIC BUTTON – CONNECT PANIC BUTTON TO COMMUNICATION NETWORK TO PROVIDE PANIC SIGNAL TO VA POLICE DEPARTMENT.
6. OVERHEAD DATA CONNECTION – MOUNT IN LAY-IN CEILING. PROVIDED FOR CONNECTION TO OVERHEAD BOOM/MONITOR ASSEMBLY.
7. THIS CARD READER SHALL ACTIVATE THE AUTOMATIC DOOR OPERATOR CONNECTED TO THIS DOOR WHEN A PROPER CARD IS PRESENTED.
8. CONNECT CAMERA TO MRI BUILDING CLOSED CIRCUIT TELEVISION SYSTEM.
9. FIRE ALARM DEVICES / HARDWARE SHALL BE SOLE-SOURCED FROM EDWARDS / EST IN COMPLIANCE WITH EXISTING BUILDING 335 EXPANSION AND CAMPUS-WIDE FIRE ALARM NETWORK. COORDIANTE WITH VA FIRE DEPARTMENT.

3023.00

Revisions	Date
ISSUED FOR BIDDING	01-31-2013

CONTECH DESIGN, INCORPORATED
Consulting Professional Engineers
519 Windsor Park Dr., Centerville, Ohio 45459
Phone: (937)435-3722 Fax: (937) 435-4685
Email: engineers@contechdesign.com Engineer Project # 12014

STATE OF OHIO PARMA NAND SINHA 42622 REGISTERED PROFESSIONAL ENGINEER

Revised By:

Drawing Title: **ELECTRICAL NEW WORK SPECIAL SYSTEMS PLANS**

Approved: Project Manager: RANDI FIORINA

Approved: Service Chief: GARY ABREU

Project Title: SITE PREP FOR CT SCANNER

Building Number: 335 | Checked: PNS | Drawn: CONTECH

Location: 4100 WEST THIRD STREET DAYTON, OH 45428

Date: 01-31-2013

Project No.: 552-CSI-333

Drawing No.: ES 4.0

VAMC, DAYTON

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978